

Annual Report on Conservation, Access & Recreation 2016/17



Introduction

Portsmouth Water operates within an environmentally sensitive area, with internationally important inter tidal mudflats and saltmarsh along the coast, chalk streams and the South Downs National Park all within our supply area. This provides major challenges to the Company at a time when customer expectations are also rising. The requirements of European legislation provide extra constraints, in addition to climate change, extreme weather events, and the day to day operating challenges of supplying water to more than 700,000 people, while minimising our environmental impact.



Photo 1: Blue bells at our Hoads Hill woodland, near Wickham

Biodiversity Update

Portsmouth Water has a statutory duty to have regard to conservation and biodiversity in exercising our functions. The Company recognise that we operate in an environmentally sensitive area and we are committed to ensuring compliance with all environmental legislation and obligations, carefully assessing the impact of our activities, especially construction projects on the environment, to ensure that the impact of such schemes is minimised.

As part of our wider commitment to improving environmental quality, we aim to conserve and, where possible, enhance biodiversity on our operational sites, which include 19 water treatment works. Sites are located in a variety of habitats including chalk down land, river catchments and coastal margins. Habitat management plans have been agreed between the company Environment & Biodiversity Specialist and the Supply Department for all operational sites.

We own one Site of Special Scientific Interest (SSSI) at the Itchen Water Treatment Works, which we manage in conjunction with Itchen Valley Country Park through a Natural England High Level Stewardship agreement, to allow cattle grazing at the meadow to maintain the wet grassland habitat in favourable condition.

The Company has made a commitment, as part of our Outcomes, to support conservation and biodiversity. As part of the commitment to our environment we employ an Environment & Biodiversity Specialist to;

- Raise awareness within the business of environmental issues and constraints, especially when we plan new schemes to ensure any impacts are avoided, minimised or mitigated.
- Provide advice to the engineering teams on all aspects of environmental legislation and biodiversity.
- Work with our operational teams to ensure that we manage the habitats on our own land holdings in a way that protects and where possible enhances their biodiversity potential.
- Ensure that we have up to date ecological survey information for all our sites so we can protect habitats and species likely to be present.
- Identify and manage projects to protect and enhance biodiversity.
- Liaise with external stakeholders on related issues to meet shared objectives such as providing 'stepping stones for nature'.

The Company are pleased to be able to report that land at two of our treatment work sites (Farlington and Itchen), identified by our surveys as having a high conservation value, have been designated as Sites of Importance for Nature Conservation (SINC).

Following the Ofwat price determination we have increased our budget in this area in order to undertake a more proactive programme of biodiversity enhancement projects. In summer 2015 we appointed a specialist consultant to complete an ecological survey of 52 of our sites. A key objective of the surveys was to identify potential biodiversity enhancement projects. In 2016 the recommendations were collated and prioritised for action into a 4 year programme. The biodiversity action plan programme was then agreed with Natural England and the Customer Challenge Group. The following prioritised conservation tasks have been completed in 2016/17.

- Employed specialist consultants to complete invertebrate surveys at 4 high conservation value sites, a water vole survey at Fishbourne WTW and a bat survey at Madehurst Reservoir.
- Employed a botanist to carry out a detailed vegetation survey and map priority habitat at 3 sites.
- Ongoing work to restore chalk grassland at Farlington WTW (Photo 2), Nore Hill and Fort Southwick.
- Converted a small building at Northbrook WTW into a bat roost (Photo 3).
- Cleared trees and scrub from around the old pond at Westergate WTW to allow more light in.
- Thinned the woodland and removed non-native species at Whitways Lodge Reservoir.
- Removed invasive willow from the old and new lagoon at Itchen WTW to diversify and enhance these wetland habitats (Case study 1).
- Thinning of woodland at the Itchen WTW to remove invasive blackthorn and other species, let in more light and plant with native species trees to diversify the woodland (Case study 1).
- Removed trees and scrub at Madehurst Reservoir to restore grassland habitat and create a sheltered clearing within the woodland for the benefit of insects and bats.
- Removed Buddleia to restore a woodland clearing at Lovedean Reservoir.



Photo 2: Farlington chalk grassland restoration area, post clearance of scrub summer August 2016



Photo 3: Bat roost created at Northbrook WTW



Photo 4: Bat box being erected at Fishbourne WTW

In addition, the following projects were also completed in 2016/17;

- Created a large new pond at Westergate WTW providing a sustainable solution for surface water drainage and sample line flow from the new UV treatment works building and associated hard landscaping (Case study 2).
- Appointed a specialist consultant to complete bat surveys, obtain a Natural England License, then complete a destructive search for bats prior to demolition of the Westergate WTW old building, which was known to contain a small pipistrelle bat roost.
- Erection of a barn owl nest and roost box at the Itchen WTW.
- Reptile relocation / introduction project at Nore Hill Reservoir.
- Woodland management at our Highwood Reservoir site.
- Hedgerow enhancement project at the George Service Reservoir site (Photo 7).
- Construction and erection of 2 tawny owl, 3 little owl and 2 kestrel boxes at a number of sites with suitable habitat for these species (Photo 5).
- Erection of 18 bat boxes and 48 bird boxes for smaller birds (Photo 4).



Photo 5 & 6: Tawny owl box erected at Fishbourne WTW & Highwood Reservoir – a tawny owl was observed in the box at Highfield Reservoir and Shedfield Reservoir in 2017

Six volunteer staff conservation working parties were held and tasks have included;

- Removal of the invasive non-native Himalayan balsam plants from the SSSI fen at the Itchen WTW.
- Removal of invasive dock plants at Highwood Reservoir.
- Removal of young trees & ragwort at Nelson Service Reservoir.
- Removing young trees from the banks of the new lagoon at the Itchen WTW.
- Tree planting to enhance a hedgerow at George Service Reservoir (Photo 7).
- Removing buddleia and creating a clearing in the woodland edge at Fishbourne WTW.



Photo 7: Hedgerow planting at George Service Reservoir (April 2016)

Case Study 1 - Enhancing the habitats at the Itchen WTW

Itchen woodland improvements



Blackthorn invasion removed, trees thinned, & more diverse species of trees planted

Itchen new lagoon – enhancing habitats



32 snipe present in winter 2016/17
& little grebe nested in 2017



The new lagoon was very overgrown with willow scrub and 6ft high nettles

Contractors were employed to clear back 85% of the willow & nettle scrub over a period of four winters, which has really opened up the habitat allowing other vegetation to flourish. Rotational cutting is now planned to control the willow and grazing has been introduced in the late summer to keep the habitat open



Roboflail clearing bramble scrub

Case Study 2 – A sustainable drainage solution for Westergate WTW

Flooding has historically been a significant problem at Westergate WTW. This posed a challenge for how to deal with surface water run-off from the new UV plant building and associated increased area of hardstanding being constructed in 2016. The site is underlain by clay which prevented the use of a soakaway.

The Company Environment & Biodiversity Specialist suggested a new pond and worked with the Project Engineer and Contractor to develop a sustainable drainage solution. The pond has been designed to cope with a 1 in 100 year storm, but the design also makes provision for the central area of the pond to hold water all year round, providing an important new habitat for wildlife, as the existing pond on the site boundary dries out in the summer.

This is possible because water from the sample taps and water quality analyser lines in the building have been directed to drain to the new pond, topping up the pond even in a dry summer. This water contains a low level of chlorine which must be removed. All water from the building is directed through a shallow channel in to which iris (yellow flag) have been planted. These plants slow down the flow of water into the pond and will ensure that the chlorine is removed. The yellow flag and other native pond species planted have been sourced from sites in Hampshire.



1. Central pond area which will hold water throughout the year
2. Iris bed in shallow channel to remove chlorine from the water
3. Shallow flood plain to hold surface water from a 1 in 100 year storm

Recreation & Access

Staunton Country Park; The proposed Havant Thicket Winter Storage Reservoir site is owned by the Company but managed through an agreement with Hampshire County Council as part of the Staunton Country Park (SCP). In 2013 the Company extended the tenancy to enable the whole of the 167 hectare site to be managed by the Staunton Rangers. The site includes a public bridleway and network of permissive paths through woodland and grassland. Portsmouth Water has worked with other stakeholders in the area to upgrade key paths to provide all weather access for the local community.

In November 2016 a new all-weather permissive path was put in linking our landing holding north of The Avenue with the network of gravel tracks within the Forestry Commission land. The new path immediately got put to good use by local residents and dog walkers.



New all-weather permissive path at Havant Thicket – north of The Avenue

Highwood Reservoir; This raw water storage reservoir site owned by Portsmouth Water is located within the popular Itchen Valley Country Park, managed by Eastleigh Borough Council. The site is open to the general public, with a circular permissive path around the building that houses the reservoir. In winter 2016/17 scrub clearance work was completed on the banks around the reservoir building to maintain public access and enhance biodiversity.

Special arrangements have been made for access at other company owned sites.

- At the Farlington and Itchen Water Treatment Works this enables schools, universities and other organised groups to participate in educational visits.
- Part of the Clanfield Reservoir site is leased to the Hampshire Astronomical Society to utilise. They have erected a number of structures and a sun dial. They organise a number of events for the benefit of their members. Small groups of members of the public are able to visit by prior arrangement with the Society.

Community Engagement

The maintenance of the grounds at our Head Office site in Havant, the Itchen WTW and some smaller sites is undertaken with the help of the New Blendworth Centre. This is a facility that was set up to help local people with learning difficulties / disabilities, who attend the centre on a full or part time basis. The centre provides work experience in landscape maintenance and Portsmouth Water is proud to have supported this initiative for many years.

The Horizon Angling Club have sole use of the West Lake at our Head Office site in Bedhampton. The club promotes the sport of angling for the disabled. Plans are in place for some new disabled angling access points to be constructed in 2017.

The Company is an active corporate member of the Hampshire & IOW Wildlife Trust.



Guided walk for the Portsdown Hill Conservation Volunteers at Nelson Service Reservoir (June 2016)

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